

**What is claimed is:**

1           1. An apparatus for supporting an object to be fabricated, wherein  
2 the object is supported spaciouly apart from a supporting surface of a  
3 chuck comprising:

4           a plurality of sliding pockets sunken into the supporting surface of the  
5 chuck; and

6           a plurality of sliding pads respectively floating-coupled in the sliding  
7 pockets such that the sliding pads are spaced apart from the supporting  
8 surface in order to provide adaptive support to the object to be fabricated to  
9 compensate for the object's expansion and contraction.

1           2. The apparatus for supporting an object to be fabricated of claim 1,  
2 wherein each of the sliding pockets includes a magnetic pocket body having  
3 an internal space that confines a part of the sliding pad to prevent the sliding  
4 pad from escaping, and a magnetic base cover spaced apart from a lower  
5 part of the sliding pad for enabling the sliding pad to be connected to or  
6 disconnected from the pocket body in one direction.

1           3. The apparatus for supporting an object to be fabricated of claim 2,  
2 wherein the sliding pad includes a sliding body with parts having a magnetic  
3 polarity identical to the magnetic polarity of corresponding parts of the  
4 pocket body and base cover to allow the sliding pad to move freely in the  
5 internal space of the pocket body with no contact to the sliding pocket, and a  
6 supporting member installed at a part of an upper surface of the sliding body.

1           4. The apparatus for supporting an object to be fabricated of claim 3,  
2 wherein the corresponding parts of the sliding pocket and sliding body are  
3 made of the same magnetic substance.

1           5. The apparatus for supporting an object to be fabricated of claim 3,  
2 wherein the sliding pad is in a reverse T shape.

1           6. The apparatus for supporting an object to be fabricated of claim 3,  
2 wherein the lower part of the pocket body and the base cover are fixed at a  
3 predetermined depth into the supporting surface of the chuck.

1           7. The apparatus for supporting an object to be fabricated of claim 3,  
2 wherein the supporting chuck is an electrostatic chuck for adsorbing an  
3 object to be fabricated through the supporting member by electrostatic force.

1           8. The apparatus for supporting an object to be fabricated of claim 3,  
2 wherein the object to be fabricated is a semiconductor wafer used for  
3 manufacturing a plurality of semiconductor devices simultaneously.

1           9. A method for fabricating an apparatus for supporting an object to  
2 be fabricated, wherein the object is supported spaciouly apart from a  
3 supporting surface of a chuck comprising:

4               sinking a plurality of sliding pockets into the supporting surface of the  
5 chuck; and

6               forming a plurality of sliding pads respectively floating-coupled in the  
7 sliding pockets such that the sliding pads are spaced apart from the

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8 supporting surface of the chuck in order to provide adaptive support to the  
9 object to be fabricated to compensate for the object's expansion and  
10 contraction.

1 10. The method of claim 9, further comprising:  
2 forming a plurality of accommodation grooves at an upper part of a  
3 body of the  
4 chuck for accommodating the sliding pocket; and  
5 sequentially pressing and inserting into the grooves the base cover of  
6 the sliding pocket and the pocket body having the sliding pad  
7 floating-coupled inside.

1 11. The method of claim 10, wherein the body of the chuck is made  
2 of a material having a thermal expansion coefficient identical or similar to  
3 that of the electrostatic chuck.